

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Attorney Docket No.: 134687NV (MHM 15085US01)

In the Application of: )  
Peterson ) **Electronically Filed On May 26, 2009**  
Serial No.: 10/660,825 )  
Filed: September 12, 2003 )  
For: SYSTEM AND METHOD FOR )  
DETERMINING THE POSITION OF A )  
FLEXIBLE INSTRUMENT USED IN A )  
TRACKING SYSTEM )  
Examiner: Mehta, Parikha Solanki )  
Group Art Unit: 3737 )  
Confirmation No.: 7037 )

**REPLY BRIEF**

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Paper responds to the Examiner's Answer mailed May 13, 2009. For at least the reasons set forth in the Appeal Brief and this Reply Brief, the Applicant respectfully requests that the Board of Patent Appeals and Interferences reverse the rejection of claims 1-23 of the present application.

**I. The Applicant Requests Reconsideration Of The Objection To Claims 2, 3, 7-13 and 22**

The Examiner's Answer indicates the following:

Appellant's brief presents arguments relating to the claim objections to claims 2, 3, 7-13 and 22 for various informalities. This issue relates to petitionable subject matter under 37 CFR 1.181 and not to appealable subject matter.

*See* Examiner's Answer at page 2.

However, in order to promote more efficient prosecution, the Applicant respectfully requests that the Board consider the arguments regarding the claim objections set forth at pages 8-11 of the Appeal Brief.

Because the Appeal Brief also addresses "appealable" issues, the Board is in a unique position to resolve these claim objections without drawing out prosecution longer by forcing the Applicant to petition issues that can be quickly and efficiently decided by the Board (a quasi "supplemental jurisdiction" in view of the fact that the Board will consider the rejections under 35 U.S.C. 102 and 103). Thus, the Applicant respectfully requests that the Board consider the arguments at pages 8-11 in the Appeal Brief.

**II. Kami Does Not Anticipate Claims 1, 4 And 6**

The Examiner's Answer presents essentially the exact same reasoning with respect to its rejections of claims 1, 4 and 6 as being anticipated by Kami as the Final Office Action. *Compare* Examiner's Answer at page 3 *with* November 18, 2008 Office Action at pages 2-3. As such, the Appeal Brief addresses these arguments at pages 11-17. The Applicant addresses the new arguments and positions with respect to the 102 rejections presented in the "Response to Argument" section of the Examiner's Answer as follows:

**A. Claim 1**

The Examiner's Answer adds the following:

Appellant argues that the rejection of claim 1 in view of Kami ('799) is improper because the reference laser probe purportedly does not constitute the claimed needle (Appeal p. 12). Examiner notes that claim 1 does not recite a needle; accordingly, Appellant's arguments have no bearing on the propriety of the rejection.

*See* Examiner's Answer at page 5.

A review of the Applicant's positions with respect to claim 1, however, clearly demonstrate that Kami does not anticipate claims 1, 4 and 6 because Kami does not describe, teach or suggest "a strain gauge affixed to an outer portion of said flexible engaging member, wherein said strain detects movement of said operative distal tip of said flexible engaging member," as recited claim 1. The Applicant notes that it is the **Office Action and Examiner's Answer** that reject claim 1 by attempting to define a "laser probe" as a "needle," and therefore a "flexible engaging member," as recited in claim 1. *See* Examiner's Answer at page 3 ("**Regarding claims 1, 4 and 6, ...** The laser probe is interpreted to constitute a needle by the common definition of that term as set forth by Merriam Webster ('a slender pointed object resembling a needle')") and November 18, 2008 Office Action at page 2. The Applicant addresses the subjective, unsupported and distorted argument set forth in the Final Office Action (and the Examiner's Answer) that attempts to equate a needle with a laser probe, and therefore a "flexible engaging member," as recited in claim 1, to demonstrate its numerous logical leaps and flaws. *See* Appeal Brief at page 12.

The Examiner's Answer also essentially reiterates the same "inherency" argument from the Final Office Action. *See* Examiner's Answer at page 5. Note, the Examiner's Answer

acknowledges that the Kami’s “gauge detects the contact **direction**” (*see id.*). However, detecting direction is not the same as detecting movement, nor has the Examiner’s Answer provided any evidence that tends to show that the two are the same or that detecting direction **necessarily** detects movement. The Appeal Brief addresses the “inherency” argument at pages 14-16.

Thus, for at least the reasons set forth in the Appeal Brief and above, the Applicant respectfully submits that Kami does not anticipate claims 1, 4 and 6.

**B. Claim 4**

With respect to claim 4, the Examiner’s Answer adds the following:

It appears that the Applicant is improperly attempting to limit the Office’s interpretation of “needle”, whereas the specification does not properly redefine the term so as to put a skilled artisan on clear notice that the term is being used to mean anything other than what is commonly accepted as its definition in the art, as would be required were Appellant properly acting as his own lexicographer.

*See* Examiner’s Answer at page 5.

The Applicant is perplexed by this statement, because it is the Final Office Action and the Examiner’s Answer (not the Applicant) that attempt to subjectively define a “laser probe” as a “needle,” which is unsupported by any evidence and is therefore improper. *See* Examiner’s Answer at page 3 (“The laser probe is interpreted to constitute a needle by the common definition of that term as set forth in Merriam Webster (‘a slender pointed object resembling a needle’)”) and November 18, 2008 Office Action at page 2.

The Applicant points out that the Examiner fails to provide support for such a definition. *See* Appeal Brief at pages 16-17. The Applicant is unable to find a definition in Webster’s Collegiate Dictionary, 10<sup>th</sup> Ed. of “laser probe.” *See id.* Moreover, the Applicant supplied a

copy of Webster's Collegiate Dictionary, 10<sup>th</sup> Ed. at page 655 listing and defining "laser." *See id.* However, there is nothing in this actual, objective definition of "laser" that equates it with a "needle." *See id.* That is, there is nothing in the actual definition of "laser" that tends to support the Examiner's subjective, unsupported definition of a "laser probe."

The Examiner's Answer also notes that "it is well within the broadest reasonable interpretation of the term 'needle' to take it as meaning 'a slender pointed object resembling a needle', as set forth by Merriam Webster and as relied upon in the previous Office Action." *See* Examiner's Answer at pages 5-6. Again, however, the Examiner's Answer and Office Action provide absolutely no guidance as to which, what, or who "Merriam Webster" they are referring. In stark contrast, the Applicant provided a copy of a page from Webster's Collegiate Dictionary, 10<sup>th</sup> Ed. at page 655 to demonstrate that the Examiner's subjective definition is unsupported by objective evidence.

Moreover, the mandate to give claim terms their "broadest reasonable construction" during prosecution does not give an examiner unbounded discretion, but is instead limited. Claim terms must not be construed in a vacuum—rather, they must be given their "ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application." MPEP § 2111.01(III) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*)).

This mandate does not give one license to formulate his/her own definition of a term in order to conveniently reject claims when the cited references do not describe, teach or suggest a particular limitation. The Examiner had every opportunity to supply evidence of the "definition"

it proposes. The Examiner did not do so, other than to merely note “Merriam Webster.” On the other hand, the Applicant provided a copy of an actual page of a dictionary that shows that the Examiner’s definition is subjective and unsupported.

While claims are given their “broadest reasonable construction,” such a mandate does not extend to unsupported, subjective definitions of terms that are at odds with their plain and ordinary meaning. Further, a person of ordinary skill in the art clearly understands that a “needle” is not a “laser probe,” or vice versa.

Thus, for at least the reasons set forth in the Appeal Brief and above, the Applicant respectfully submits that Kami does not anticipate claim 4.

### **III. Kami Does Not Render Claims 2, 3, 5 And 7-23 Unpatentable**

The Examiner’s Answer presents essentially the exact same reasoning with respect to its rejections of claims 2, 3, 5 and 7-23 as being unpatentable over Kami as the Final Office Action.

*Compare* Examiner’s Answer at pages 3-5 *with* November 18, 2008 Office Action at pages 3-4. As such, the Appeal Brief addresses these arguments at pages 17-22. The Applicant addresses the new arguments and positions with respect to the 103 rejections presented in the “Response to Argument” section of the Examiner’s Answer as follows:

#### **A. Claims 7 And 14**

The Applicant respectfully submits that Kami does not render claims 7 and 14 unpatentable for at least the reasons discussed with respect to claim 1 in the Appeal Brief and this Reply Brief.

**B. Claims 5 And 17**

The Examiner's Answer relies on *In re Harza* for the proposition that the "mere duplication of known prior art parts to yield nothing more than an expected result is obvious and unpatentable." *See* Examiner's Answer at page 6.

Claims 5 and 17 do not, however, recite mere "duplication of known prior art parts to yield nothing more than an expected result." *See* Appeal Brief at pages 17-19. In *In re Harza*, the "only distinction to be found is in the recitation in claim 1 of a plurality of ribs on each side of the web whereas Gardner shows only a single rib on each side of the web." *See In re Harza*, 274 F.2d 669, 671 (CCPA 1960) (emphasis added). In contrast to claims 5 and 17 of the present application, *In re Harza* merely added additional ribs at the same areas of a component. The configuration in *Harza* does not lead to any different functionality or results, which is in stark contrast to claims 5 and 17, as explained in the Appeal Brief at pages 17-19. Indeed, the specification of the present application is replete with examples of the utility and advantages of additional strain gauges. *See* present application, e.g., at page 9, line 20 to page 12, line 14.

Thus, for at least the reasons set forth in the Appeal Brief and above, the Applicant respectfully submits that Kami does not render claims 5 and 17 unpatentable.

**C. Claims 7 And 20**

The Examiner's Answer also adds the following with respect to claims 7 and 20:

Kami ... does expressly teach that microscope as being configured to observe a surgical field (col. 19 lines 31-59) and a surgical tool (col. 22 lines 65-66). Any person of ordinary skill in the art at the time of invention would readily recognize that the laser probe of Kami ... reasonably constitutes a surgical tool, and that observation of such a tool with a microscope reasonably constitutes optical tracking as claimed....

*See* Examiner's Answer at page 7 (emphasis added). However, claims 7 and 20 do **not** recite a user **observing** an object through a **microscope**. Instead, claim 7 recites, in part, "at least one of an **electromagnetic, optical, inertial position, and ultrasound tracking system** configured to **track** said medical instrument." A person of ordinary skill in the art would clearly understand the stark difference between a **human being observing** an object through a **microscope** (*see* Kami at column 19, lines 43-44 ("an observation region is formed on **retinae** and thus **visualized** three-dimensionally" and column 19, line 56 ("the **surgeon's observation field of view**")) and, for example, an electromagnetic **tracking** system that **tracks** a medical instrument.

Thus, for at least the reasons discussed in the Appeal Brief and above, the Applicant respectfully submits that Kami does not render claims 7 and 20 unpatentable.

#### D. Claims 21 And 22

As discussed previously, the Examiner's Answer attempts to argue that, because Kami discloses a strain gauge that detects direction, it therefore detects movement. However, as explained in the Appeal Brief and this Reply Brief with respect to claim 1, the Office Action does not show or explain why this is necessarily so.

With respect to claim 21, the Examiner's Answer goes even further by summarily concluding that "detection of pressure against the distal end of the probe ... reasonably constitutes detection of information regarding a distal location of the probe." *See* Examiner's Answer at page 7. Again, however, the Office Action **provides absolutely no evidence to support such a conclusory statement**. The Final Office Action and Examiner's Answer do not point to anything in Kami or any other reference that describes, teaches or suggests "wherein said strain gauge provides information regarding a location of said operative distal tip in relation to a

longitudinal axis of said support member,” as recited in claim 21, or “wherein said at least one strain gauge provides information regarding a location of said deflectable operative distal tip,” as recited in claim 22.

A rejection based on obviousness cannot be supported by subjective, conclusory and convenient statements that are used to fill in the gaps of a cited reference.

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness **cannot be sustained with mere conclusory statements**; instead, there must be some articulated reasoning with **some rational underpinning** to support the legal conclusion of obviousness."

*See* the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval) (emphasis added).

Thus, for at least the reasons set forth in the Appeal Brief and the Reply Brief, the Applicant respectfully submits that a *prima facie* case of obviousness has not been established with respect to claims 21 and 22.

#### E. Claim 23

The Examiner's Answer merely adds "Applicant attacks the previous rejection of claim 23 by making allegations similar to those presented for claims 21 and 22, which are shown above to be ineffective in overcoming the prior art." *See* Examiner's Answer at page 7. This conclusory statement from the Examiner's Answer notwithstanding, the Applicant demonstrates

that the Office Action does not establish a *prima facie* case of obviousness with respect to claim 23 in the Appeal Brief at pages 21-22.

#### **IV. CONCLUSION**

For at least the reasons discussed in the Appeal Brief and above, the Applicant respectfully submits that the pending claims are allowable in all respects. Therefore, the Board is respectfully requested to reverse the rejections of pending claims 1-23.

#### **PAYMENT OF FEES**

The Commissioner is authorized to charge any necessary fees, or credit overpayment to Deposit Account 50-2401.

Respectfully submitted,

Dated: May 26, 2009

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